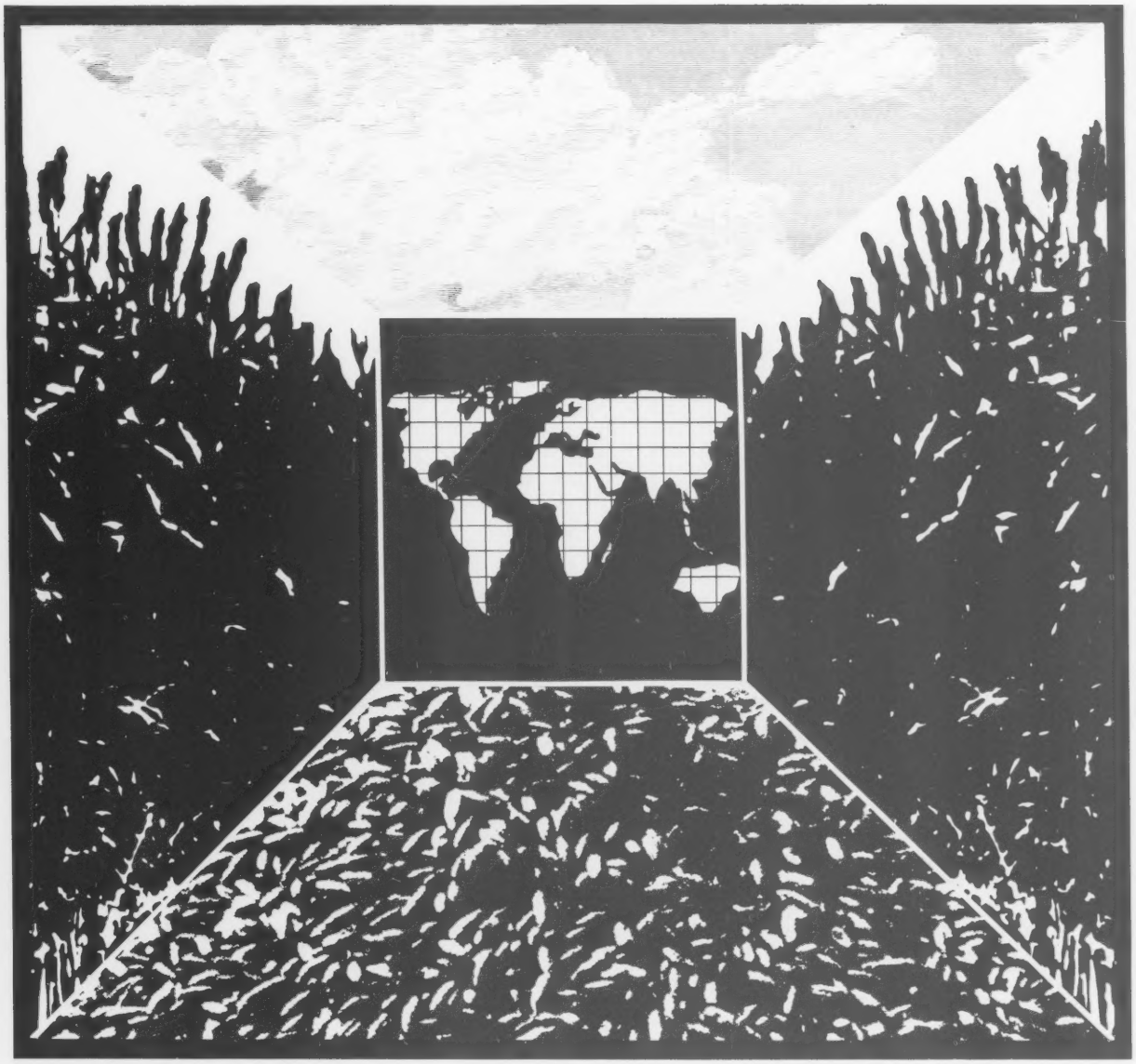
FARM INDEX

U.S. Department of Agriculture
November 1978

A Bounteous Harvest



Economics, Statistics, and Cooperatives Service

Outlook

Despite earlier reports of shrinking cattle numbers, don't be surprised if fed cattle marketings climb during the fall. It's true we have fewer cattle, but a lot more of them are being fattened.

The USDA *Cattle on Feed* report shows that producers plan to boost fed cattle marketings 9 percent in the fourth quarter, and the experts figure that goal will be reached, and then some.

Peering around December's corner, the cattle on feed in the middle-weight groups on October 1 will probably be ready for market in the first quarter of '79. And the numbers show an increase from a year earlier.

So, if placements are large this fall, the likelihood is for increases in fed cattle marketings early next year.

A new record, maybe. In fact, last year's record January-March marketings could be exceeded. Obviously, such large marketings could slow down fed cattle price advances during December.

Fed cattle will probably account for about 70 percent of this year's total commercial slaughter, up from 1977's 62 percent, but below the high-water mark of 77 percent in 1972-73.

Very large fed cattle shares of the total slaughter could come back next year. The 1972-73 levels could be reached, as nonfed slaughter drops.

The herd is down. Meanwhile, the total cattle inventory continues to dwindle. Remember, it was up to 132 million head in 1975, when low cattle prices and rising feed costs spurred producers to cut the herd. By last January, the count was down to 116.3 million head, and it may sink to about 111 million by January 1979.

Possibly, the size of the inventory won't shrink much more. The end to liquidation that everyone's been waiting for might be in the works. At least, some signs point in that direction: Cow slaughter is slowing, and the placement of heifers in feedlots seems to have eased off. On October 1, there were still about 11 percent more heifers on feed than a year earlier.

But steers on feed were up 18 percent. That's different from last spring, when the number of heifers on feed was rising faster than the number of steers. The change could mean a slowing of the feeding of heifers and an increase in the number headed for the breeding herd.

Is this the club car? But if they go, they probably shouldn't count on making the trip by train. It hasn't been much of a problem for cattle producers—although poultry producers were hurt a little—but other parts of agriculture have been troubled by the railroad crunch.

Earlier this year, shipments of many agricultural products, especially grains and feeds, were held up by a railroad strike. The shortage of transportation threw a monkey wrench in many producers' plans, and they had to rearrange schedules and transportation.

Besides the strikes, too few boxcars and covered hoppers still nag agriculture. The dearth could cause some local transportation headaches and storage problems, especially considering the size of the harvest—projected to set a new output record.

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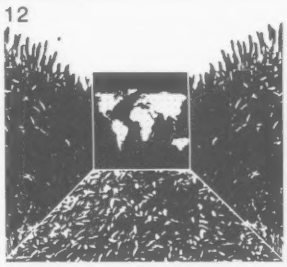

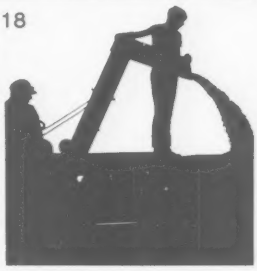

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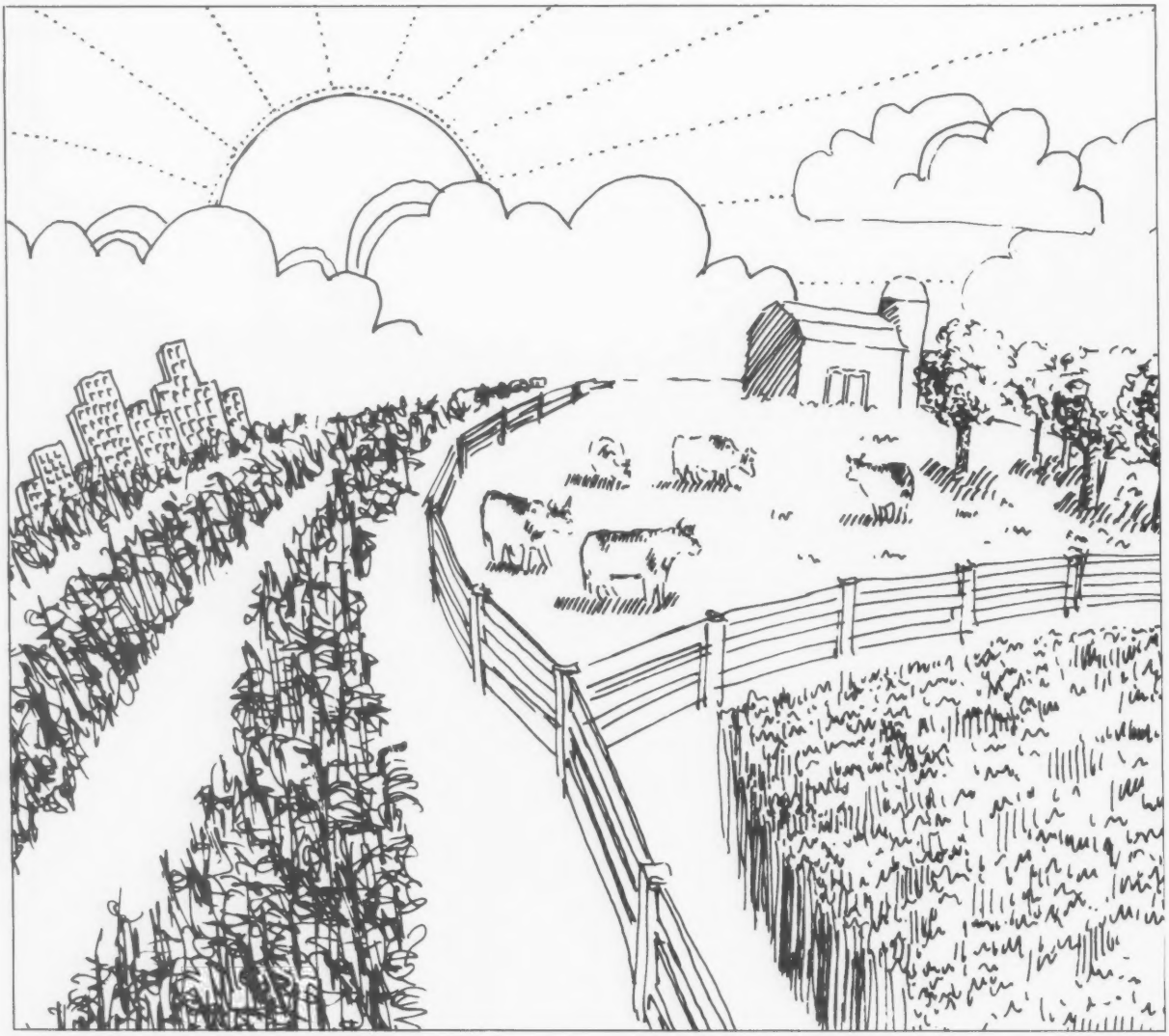
A Brighter Outlook



Mankind appears to be slowly pulling ahead in its race against famine, as worldwide per capita food production creeps upward following a period of intense concern in the early 1970's.

From 1974 to 1977, per capita production gained 4 percent, after food prices jumped sharply and supplies dwindled. And the 1978 world grain production outlook makes the picture even brighter.

In other words, the production increases of food outpaced population growth across the globe—even though inequities in distribution continued to result in hunger for millions.

Brighter prospects. While this may be far from ideal, the overall prospects seem considerably brighter than 4 years ago, when many questioned whether worldwide starvation lurked just years away. Responding to such public concern, USDA took a hard look at the issue in the study, "The World Food Situation and Prospects to 1985." The 1974 report concluded that, despite the then-current distress, a long-range worldwide shortage of food was unlikely.

Today's shortrun outlook tends to support that conclusion. Not only did worldwide increases in food production exceed population gains after 1974, but improvements occurred in many nations that needed help the most.

Changes in the developing countries parallel those for the world so that 1978 per capita production in the developing countries will probably exceed the previous high of 1976 and be at least 8 percent above the lows of the early 1970's.

South Asian progress. Most encouraging, South Asian nations, such as India and Pakistan, have greatly improved production and grain stocks. This region is often a problem area, where as many as two-thirds of the world's hungry people may be found—and where two-thirds of U.S. food aid goes in some years.

India, the focus of hunger concern in 1974, may harvest a grain crop so large that, after meeting its considerable domestic needs, enough may be left over for export.

This isn't to say there aren't some bleak exceptions. Bangladesh and some parts of Africa over the years have been losing ground as per capita food production actually declines.

Spotty trend. This trend toward general improvement—spotted with some areas where hunger is getting worse—seems likely even over the long haul. In fact, the good and bad may occur simultaneously within a given region as years pass: Food production may gain regionally, while some areas within that region suffer serious problems in producing and distributing food.

Even with this less-than-apocalyptical outlook, a large portion of the world's poor are not being adequately fed.

And the outlook for years to come is for a continuing struggle, despite a U.S. commitment to fight hunger that is based on a 1976 Congressional resolution on the "Right to Food" that specifically recognizes the human right to a nutritionally adequate diet and makes this a cornerstone of U.S. policy.

This lofty commitment will require much effort and ingenuity, if it is to succeed in eradicating hunger.

Lack of data. Perhaps indicative of the frustrations involved in fighting hunger, there are varying estimates of how many people in the world are malnourished; where they are; and the kind, degree, and specific cause of their affliction.

The Food and Agricultural Organization of the United Nations estimated that in 1970, about 400 million people in developing countries outside of Communist Asia were malnourished, that the number increased to about 455 million during poor crop years in 1972-74, and may have declined some since then. Yet, FAO admitted the figure was, at best, a rough estimate.

For the general world population, the long term outlook for mitigating widespread malnutrition may hinge on food prices and employment. Today, purchasing power—or the lack of it—often governs whether a family in either the poorest nation or richest nation has feast or famine. The food is available, in most cases, but the distribution of the food depends on buying power.

Food price factor. A major factor, then, is the outlook for food prices in the years ahead. If food prices increase faster or slower than the general rate of inflation, then the amount of food that can be purchased with the same amount of buying power would vary accordingly.

The 1974 USDA study focused on the question of whether the real cost of food (farm-produced basic food without expensive processing and packaging) will increase in the future, and concluded that prices will be higher, but not so high as during 1972-74, in part because prices to farmers were so depressed in years preceeding 1972. Also, costs of inputs such as fertilizers will rise.

Any projection of this future food purchasing power must, however, be very tentative. Much depends on technological developments which could greatly increase production, and on whether there are enough sufficiently productive jobs available to generate adequate purchasing power.

Affluent's consumption. Still another possible factor—albeit a highly debatable one—is consumption patterns among the affluent. Some critics contend that such food forms as meats—much in demand by the affluent in both rich and poor countries—waste grains through inefficient conversion of protein which could be used to feed the world's poor. It is important, however, to recognize that factors such as government policies far outweigh the influence

on food prices of the level of consumption by the affluent.

Further, this issue hinges on whether food supplies will keep up with the demand. If the demand unexpectedly overtakes supply, then prices will rapidly—and, to the poor, disastrously—increase. The high consumption rates among the affluent would help push up the prices to the poor.

In examining all the obstacles to improved prospects for food supplies, there's a danger of missing the most optimistic development of all since the 1974 study was issued.

Dropping birth rates. A recent UN study found birth rates dropping rapidly in many developing countries. In fact, since the 1960's, birth rates dropped by about 15 percent in three or four dozen countries that have more than 40-60 percent of the population of all developing nations. Moreover, these are countries where statistical gathering is considered reliable.

A final note of encouragement since the 1974 report is that leading meteorologists, who studied long-range climate trends in a joint effort by USDA, the Department of Defense, and the National Oceanic and Atmospheric Administration, generally agree that world climate patterns aren't likely to change enough by the end of the century to greatly affect agriculture. In other words, speculation that a new ice age, or a climatic warming trend, would soon dawn to ruin food production has been dampened.

Government policies. Since it appears that nature will cooperate enough to allow continued growth in food production for the next several decades, the next major concern, then, may be government policies. U.S. agricultural and foreign policies have, by far, the greatest impact on the hope of the world's hungry because of America's great food output.

Fortunately for the rest of the world, the U.S. has traditionally exercised great generosity towards people in serious need.

In recent years, however, many Americans were becoming impatient as it appeared that very little of the aid given to developing nations has been "trickling down" to improve the lot of the poor masses. Instead, aid found its way to the coffers of the already rich and privileged.

Aiding the poor majority. So, in 1973, Congress enacted legislation to redirect foreign aid to the poor majority who usually dwell in rural areas of developing nations. At least 75 percent of all food aid was to be sent to nations defined as "poor".

Thus, U.S. policymakers have come to believe that the main obstacles to eradicating hunger are political—not natural or technological.

This doesn't mean that developing nations intentionally force poverty on their masses. Instead, they face the hard political choice between keeping food prices cheap for urban consumers, and thus discouraging agricultural development, or opting for agricultural expansion by allowing higher prices to farmers while angering the urban masses.

Similarly, land reform may be needed, but to break up large landholding blocks and embark on other rural reforms would meet with powerful political opposition.

Creating jobs. So, faced with such political realities, the U.S. is trying to help by providing aid which supports the creation of labor-intensive jobs, and development of appropriate technologies for these nations.

Food aid has also been redirected not only to feed the starving, but to encourage creation of new jobs, and to discourage the violation of human rights by governments receiving such aid.

In line with these new policy directions, the Carter Administration is exploring new efforts:

- It is committed to raising development assistance. Bilateral aid other than food rose 23 percent last fiscal year. As for P.L. 480 food aid, the total for fiscal year 1979 is to be 42 percent higher than FY 1977.
- It is forming a Hunger Commission to seek new ways to improve U.S. efforts to eliminate domestic and foreign hunger and malnutrition.
- The U.S. has proposed the establishment of an international system of nationally held grain reserves within the framework of a new International Wheat Agreement.
- A 6-million-ton U.S. wheat reserve has been proposed to meet emergency food needs and to guarantee U.S. food aid commitments.
- Domestic agricultural programs, such as a farmer-held grain reserve, and the set-aside program are designed to stabilize prices. These, together with the proposed international grain reserve system, could cushion the world's poor from the sometimes disastrous price swings of the past.

While no one suggests that these programs are a panacea to the world hunger problem, they offer hope of an improved diet for millions of people, and progress toward realizing the human "right to food" for the poor.

[Based on the speech, "World Food—Current Situation and Prospects: U.S. Role and Programs," by Kenneth R. Farrell, ESCS Administrator, given at the Festival on Religion and Rural Life, July 31-Aug. 3, 1978.]

Underwater Feedlots

Lazing away a summer's day with rod 'n' reel, waiting for a bobber to wiggle and dive—that's the image many people have when the topic is catfish.

But to a growing body of farmers, catfish are a new and exciting—albeit chancy — crop that may add substantially to farm income.

Perhaps as many as 5,000 farmers in the U.S. raise fish for harvest—a form of aquaculture. Exactly how many there are isn't known because, unlike with most other farm crops, no routine data reporting system exists.

Not counting fish raised in hatcheries for stocking, Americans turned out an estimated 100 million pounds of farm-raised fish last year. Roughly 70 percent of it was catfish.

Some comparisons. That may seem small compared with, say, pork production, which often reaches a billion pounds a month. But catfish production today is huge compared with 1960, when it was probably 320,000 pounds.

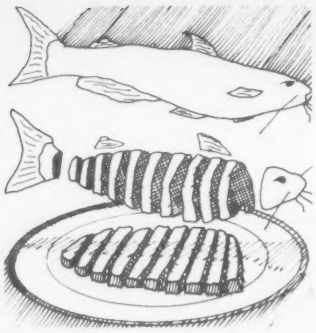
Acreage devoted to catfish has also mushroomed, from about 400 acres in 1960 to more than 56,000 this year. And the expansion is likely to continue. It may rise a whopping 30 percent this year—although if it does, expansion will probably backslide next year.

Altogether, however, the growth of the catfish industry has been slow and steady. The American industry is only 30 years old, although some small aquaculture efforts have been underway in the U.S. since the 1870's. But while fish raising is an embryonic industry here, it's been practiced successfully around the world for thousands of years. Writings from China indicate aquaculture was widely practiced there 4,500 years ago.

High prices. This year's leap in U.S. production is due to relatively high prices catfish farmers received last year. Farmers hauled in about 60 cents a pound for live fish in 1977, and that encouraged many folks to jump into the catfish business. But larger production this year has forced prices down, to about 52 cents this summer. One likely result of the drop in prices will be for many of the new producers to bail out of this capital-intensive form of farming.

According to USDA estimates, about 95 percent of those people who entered aquaculture for the first time dropped out for money reasons. Of the 5 percent who stayed in fish farming, most of them have something in common—they're professional farmers.

Farming for background. A background in farming is more than merely helpful. The percentages of failure indicate it's nearly a prerequisite to successful fish raising. Professional farmers, it's thought, do better because they treat aquaculture the same as any other farm



venture, with problems in marketing, fertilization, and transportation, in addition to the special difficulties facing fish farmers.

Those special difficulties include a lack of knowledge about fish and fish farming. Most producers find they must learn "on the job," because few formal training programs are available.

With or without such training, caring for fish is more difficult than caring for other livestock. For example, if a cow takes sick, the farmer can often spot it quickly and treat the disease before any permanent damage is done.

Invisible sickness. But with fish, since they can't be seen, the farmer can't spot illness sometimes. Often, the farmer's first indication there's a problem is when dead fish begin floating to the surface. For this reason, fish feeding habits must be monitored very closely.

Moreover, as in a total confinement livestock operation, once a disease starts in a fishpond, it spreads rapidly.

Besides, even if farmers can spot disease in the fish, they're not always sure what to do about it. Identifying the illnesses and other problems peculiar to fish is a difficult task.

But farmers and researchers are making progress in this area, seeking to protect the large investments that go into starting a fish farm.

Feedlots without fences. Most of these farms can be compared with cattle feedlots. Farmers buy fingerlings—fish that weigh only a few ounces—and feed them high protein pellets or mash, until they weigh a pound or pound and a half.

The feeding process usually takes about 6 months, and the project is feed-efficient. The feed-conversion ratio is about two to one—a farmer gets a pound of catfish for every 2 pounds of feed—far better than with most other forms of animal raising.

But the cost of feeder fish and feed pale in significance to the cost of the farm itself. A typical catfish farm consists of two or three ponds, covering a total of about 50 acres. Water supply is usually from wells.

Air for the water. The water also must be aerated to prevent a fish kill caused by oxygen depletion—one of the most common and most serious fish farm problems. Also aeration purifies water to make it suitable for domesticated fish.

Hard work plays a key role in catfish farming. The farmer usually finds that fish need almost constant attention. Ponds must be cared for; undesirable, wild fish that compete with the farm-raised crop for feed must be removed; oxygen, feed, and water levels, quality, and acidity must be checked daily; and mud and silt must be cleaned from the pond.

If all that effort results in a good crop, the prospect of collecting the harvest is hardly pleasant for catfish farmers. Harvesting catfish is backbreaking labor, and there's no really easy way to do it. Hauling in the fish for shipment in a tank truck to a processor is, besides tough, a tricky business.

The harvest. Most farmers don't feed the fish the day before harvest, and special aeration precautions are taken to make sure the oxygen levels in the pond are adequate. When all is in readiness, the farmer partially drains the ponds, and uses a winch to haul up a large net—or seine—that's been stretched from bank to bank. With good equipment, the farmer should be able to harvest 70-90 percent of the catfish in the pond at one time.

Some species transport better than others, farmers have found, and that helps them decide what kind of fish they want in their pond. The channel cat, for example, weathers the "storm" of being pulled from the pond and placed in a tank truck rather well. Blues may not survive as well in the tank truck, but they generally grow larger than channel cats if they stay in the pond.

Which brings up another form of "harvesting." And, although it's not as efficient as netting the fish, it's a lot more fun.

Worm drowning. This is where the old rod and reel come in. Fee-fishing ponds are important to many catfish farmers, who derive a substantial share of their income from them. In 1976, 43 percent of all farm-raised catfish were sold in fee-fishing operations.

Fee fishing takes many forms, but generally, the farmer charges the angler to catch cats, either through a flat fee or by the pound, so the more fish caught, the greater the bill. Often, a combination of flat fees and per-pound rates are used.

Over the years, farmers have found that the channel cats are probably best for fee-fishing ponds because they feed well, and bite readily on sport-fishing tackle. Blue catfish, on the other hand, often grow larger than channel cats, after the first year of feeding.

Undesirable fish. Other kinds of farm-raised catfish include bullheads, a smaller variety. More often than not, bullheads are wild, having found their own way into the farmers' catfish ponds. They tend to overpopulate the pond, and that can cause oxygen depletion. Also, because of their size and less-than-favorable ratio of waste to meat, they bring a lower price per pound at market.

One of the most popular fish for fee fishing is the white catfish. This one will

usually bite during the day, while the others sometimes won't. They also survive better than most breeds if the oxygen levels are low. However, the white has a larger head than channels or blues, proportionately, so the percentage of dressed weight is smaller.

Stronger demand. The call for all these types of farm-raised catfish is growing louder. Americans ate nearly 14 pounds of fish (all types) last year, continuing an annual rise in consumption that's been small but steady since 1969. From 1909 to 1969, consumption hardly changed, averaging 11 pounds a year.

An important point is that while the number of wild fish is slipping, demand is growing stronger. The slack is being picked up, in part, by a burgeoning fish-farming industry.

But even more of the seafood market is being taken by imports. More than half of America's seafood is brought in from overseas. With experts guessing that demand for fish will expand further, it's clear that fish farming must expand, too, or the imports will soon swamp domestic seafood.

Lack of vigor. But, according to the Library of Congress, aquaculture isn't moving ahead like it should. Clearly, more processing plants are needed, along with better information for farmers, better marketing, and more research funding.

Regarding processing, a few catfish farmers have plants of their own, but most sell the "catch" to a processor. After cleaning the fish, the processor sells them to restaurants or stores. Restaurants take the lion's share of the cats.

Restaurant demand for farm-raised catfish is strong in some parts of the country, although virtually unknown in others. That's a marketing and image problem that producers are combating.

They're proving to the public that farm-raised catfish bear little resemblance to their wild cousins. Taste and texture are quite different.

Progress in P.R. Signs of success in farmers' campaign are cropping up in some stores and on some restaurant menus, particularly in the South. The words "Farm-Raised Catfish" are being prominently displayed, distinguishing the product of a controlled environment and feed from the typical "bottom feeders" caught in rivers, ponds, or any other body of water deep enough.

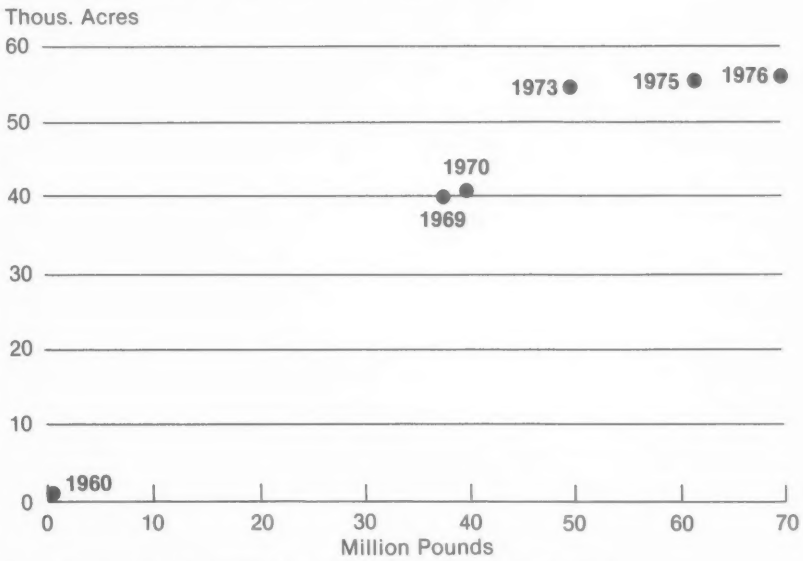
Farmers' successes are showing in another way, too. Last year, for the first time, part of a Federal farm law addressed itself specifically to aquaculture. This kind of farming has been elevated to be one of the four main USDA functions in the 1977 Food and Agriculture Act.

Fish farms still aren't swimming in Federal funds, but the attention is helpful. The industry itself is continuing its public relations and research efforts, while the Government does its work.

Currently, wild catfish make up a third of the catfish produced annually, according to estimates from the National Marine Fisheries Service. But in the future, it's expected that share will shrink as catfish farming takes its place in the agricultural community.

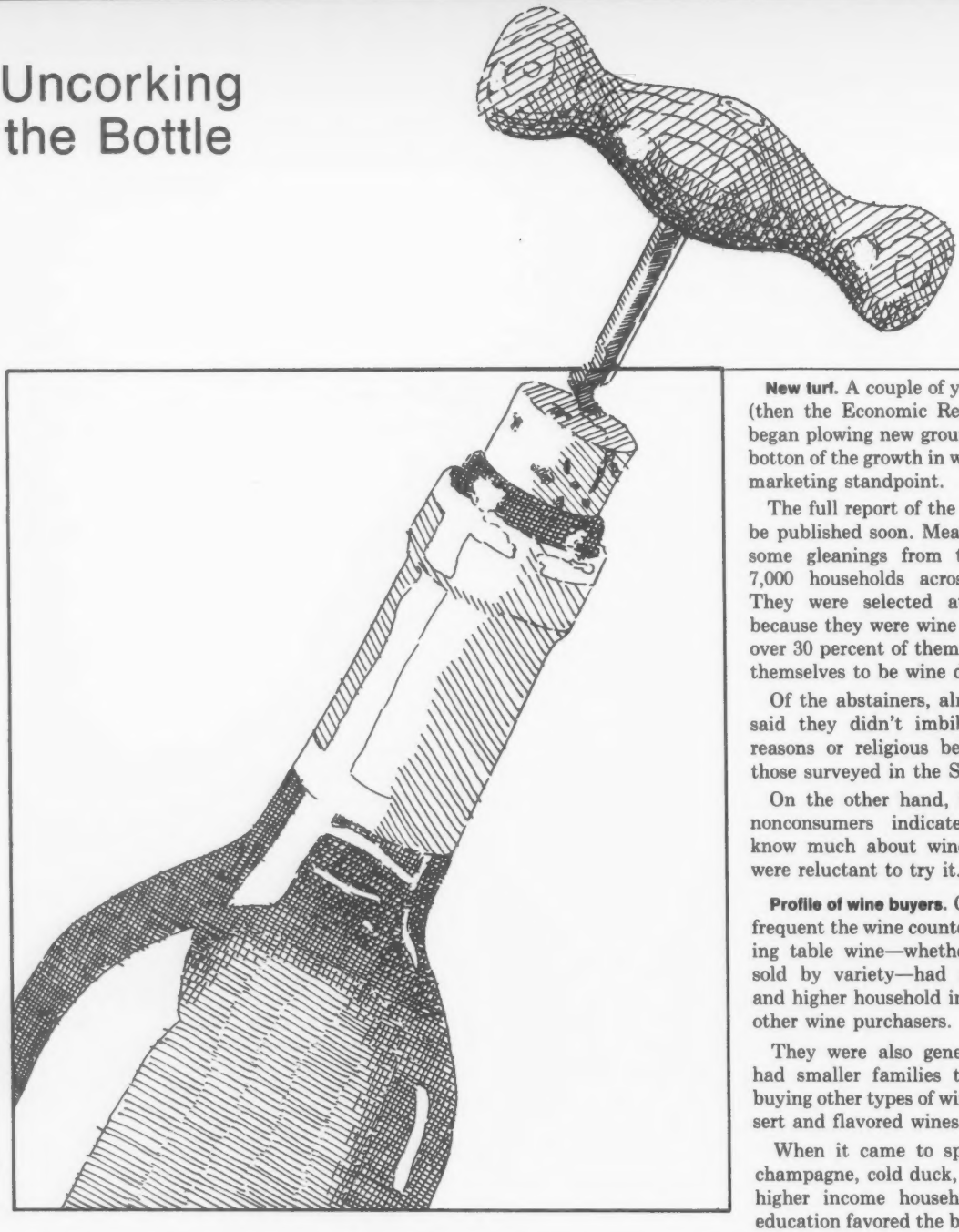
[Based on special material from Dwight Gadsby, Natural Resource Economics Division, H. R. Schmittou, Soil Conservation Service, and publications of the National Marine Fisheries Service, Little Rock, Arkansas.]

Farm-Raised Catfish in the U.S.



Data estimated. Source: National Marine Fisheries Service.

Uncorking the Bottle



The U.S. wine industry is thriving on the vine.

The farm value of grapes now tallies more than $775 million a year, up roughly $95 million since 1974, and the area planted to grapes has expanded by about a third in the same period.

Numbers on grape and wine production we have. Less is known about the clients of this booming industry, the lifeline for some 14,000 vinyard operators.

Questions like who buys the drink, the brands they prefer, and where they buy haven't been answered until recently. About the only data on wine marketing had to do with shipments, inventories, and the number of wineries.

New turf. A couple of years ago, ESCS (then the Economic Research Service) began plowing new ground to get to the botton of the growth in wine sales from a marketing standpoint.

The full report of the economists will be published soon. Meantime, here are some gleanings from their survey of 7,000 households across the Nation. They were selected at random, not because they were wine buyers. In fact, over 30 percent of them didn't consider themselves to be wine drinkers.

Of the abstainers, almost 40 percent said they didn't imbibe for personal reasons or religious beliefs, especially those surveyed in the South.

On the other hand, the majority of nonconsumers indicated they didn't know much about wine and therefore were reluctant to try it.

Profile of wine buyers. Of those who did frequent the wine counter, the ones buying table wine—whether or not wines sold by variety—had more education and higher household incomes than the other wine purchasers.

They were also generally older and had smaller families than households buying other types of wine; namely, dessert and flavored wines.

When it came to sparkling wines—champagne, cold duck, etc.—again, the higher income households with more education favored the bubbly stuff more so than the other group.

Households buying the most wine paid less than the others, probably because they bought larger quantities at a single stop.

Top companies. When it got down to brands, the biggest wine companies had most of the market—over 54 percent. Gallo had most of that with 33 percent,

followed by United Vintners with 13 percent. However, keep in mind these are national shares of the market. Many firms dominated in certain regions.

As for preferences by brand, the ESCS study found strong loyalty in the varietal table wines, such as United Vintners and Mogen David. Brand loyalty for the nonvarietal wines was weaker.

In the sparkling wines category, the survey reported strong preferences for Gallo, Franzia, and Guild. For flavored wines, only Gallo and Mogen David appeared to have strong preferences for brands.

Exceptions to brand preference. But the ESCS study goes on to say: "While there was some degree of brand preference for all wine types, the panel of households did not show strong brand preference for all wines produced by a single company.

"Each company appears to serve unique segments of the U.S. wine market . . .

"One might theorize that most individuals approach the purchasing of wine with a given type of product in mind."

Overall, most wine fanciers buy at supermarkets (over 50 percent), followed by liquor stores (39 percent), drugstores (4 percent), and other places (6 percent).

Who's drinking more? The New England, Middle Atlantic, East North Central, and Pacific regions had the highest percentages of households that increased their wine consumption over the year prior to the survey.

The South abstains. The three southern regions (South Atlantic, East South Central, and West South Central) had the smallest percentages of households that increased their wine consumption over the previous year. The southern regions also reported the largest percentages of households never drinking wine.

Of the households using less wine, almost three-fourths said they drink it less than once a month; a tenth consume wine not more than once a month.

Nearly 40 percent of the abstainers said they have a beer now and then, and about 30 percent of the nondrinkers of wine reach for distilled spirits. Almost two-thirds of the households that never buy wine said they don't take alcohol in any form.

[Based on the manuscript, "The U.S. Wine Market," by Raymond J. Folwell and John L. Baritelle, Commodity Economics Division.]

Here's To Ya

Wine glasses are clinking as never before in American households, with wine consumption at a record-shattering 7 quarts a person. That's up from less than 4 quarts in the early 1960's and almost double our intake of orange juice.

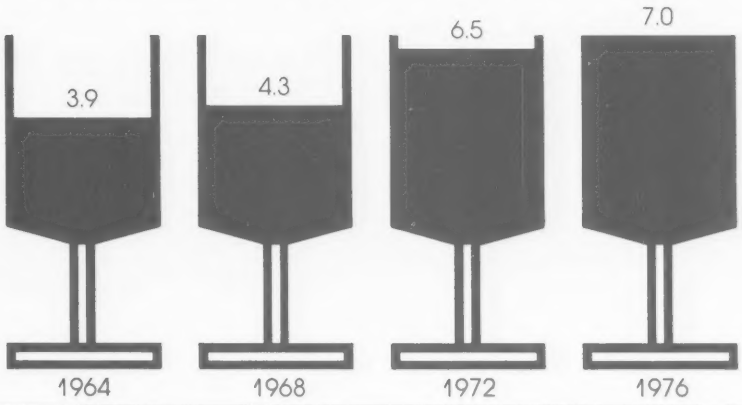
Few industries can tout the sales growth of the American wine industry during the sixties and seventies. In some years wine sales spouted as much as 14 percent. And domestic production of table wine shot from 53 million gallons in 1960 to 231 million in 1976.

Capitalizing on the wine boom of recent years, many family-owned companies saw new opportunities in merging or consolidating with conglomerate-type corporations.

The unrivaled centers of the U.S. wine industry since the days of prohibition have been California, which provides better than four-fifths of the Nation's wine flow, and New York, with about a tenth of the market.

But a growing number of States are taking their place at the table, including Washington and Oregon, where the seeds of a thriving grape industry are fast taking root.

U.S. Wine Consumption—Quarts Per Person



A Bounteous Harvest

Thanks to magnanimous Mother Nature, good crop weather prevailed throughout most of the globe this year, bringing forth bounteous harvests from all corners of the earth.

Badly needed rain fell in Australia, Argentina, and Thailand, helping those countries recover from drought-reduced yields.

As a result, world production of wheat and coarse grains is forecast at slightly more than 1.1 billion tons in 1978/79, about 4 percent more than the previous crop season.

The world wheat harvest is projected to reach about 412 million tons (up 8 percent from last season), with just about every major producer—Australia, Argentina, India, Turkey, Western Europe, and the U.S.S.R.—reporting improved yields.

Bountiful Soviet harvest. The Soviet harvest is currently forecast to be significantly above last year's crop—110 million tons, compared with 92 million in 1977/78. (This estimate is contingent on favorable weather through completion of their harvest.)

On the other hand, Eastern Europe's wheat production is expected to be down slightly. And the U.S. crop is forecast to be about 12 percent below the 1977/78 harvest, reflecting the impact of the wheat set-aside program.

As for coarse grains (corn, sorghum, oats, barley, and rye), world production is projected at about 720 million tons in 1978/79, 4 percent more than the previous crop season.

Improved yields are reported for Australia, Thailand, Brazil, and the U.S.S.R., while Canada, Argentina, and South Africa are forecast to have lower 1978/79 outputs.

More than last season. Western Europe and the U.S. are expected to have higher levels of coarse grain production than they did last crop season. Abundant rainfall through mid-August allowed the American corn crop to prosper, partly offsetting governmental supply-management efforts, such as the feed grains set-aside program.

World rice production in 1978/79 is forecast to rise nearly 3 percent to about 376 million tons. Crop conditions are currently favorable in the People's Republic of China, India, Indonesia, Thailand, the Philippines, and the U.S.

Abundant supplies of world grain seem likely for this crop season. Now the question is: What's to be done with it?

World consumption of wheat and coarse grains is expected to expand to slightly more than 1.1 billion tons in 1978/79—3 percent above last year's level.

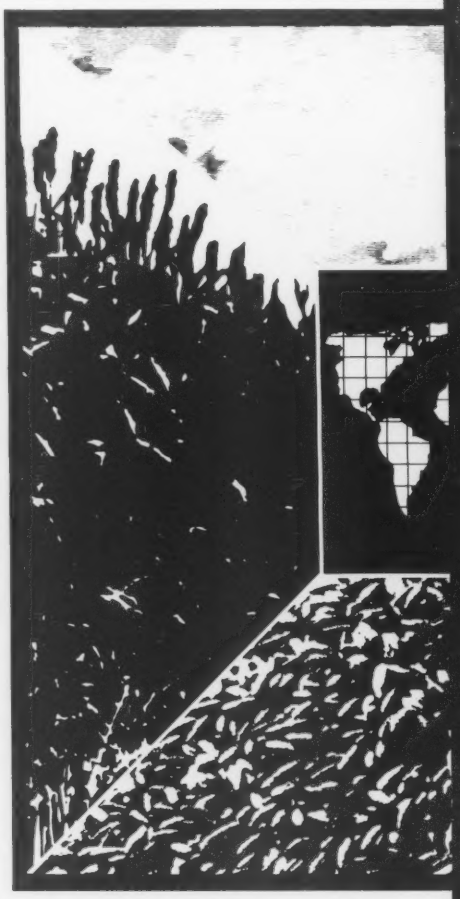
Consumption on the rise. Three-percent increases in utilization are seen for both wheat and coarse grains, a growth rate roughly in line with the expansion of the world's population.

Consumption forecasts vary around the globe. For instance, in Western Europe, coarse grain utilization is expected to rise.

In Japan, wheat consumption is expected to increase slightly, but the continued expansion of coarse grain use is threatened by large volumes of rice stocks in the country.

The Japanese Government has declared its intention to dispose of these stocks, and one option is to subsidize sales to feed compounders to use rice in feeds. Such a policy would lower the price of rice relative to the price of other grains in livestock feeds, thus encouraging rice use.

Coarse grains vs. substitutes. Coarse grain use in European Economic Community (EC) livestock feeds is facing continued competition from grain substitutes, such as tapioca and corn gluten feed.



The reason: The EC's Common Agricultural Policy (begun in 1962) artificially raises the price of grain relative to the cost of the grain substitute.

As long as the policy maintains the distortion of relative prices to the disadvantage of grain, increased usage of

coarse grains will be difficult to achieve in the EC (France, Belgium, Luxenbourg, Italy, the Netherlands, West Germany, Denmark, Ireland, and the United Kingdom).

Consumption of both wheat and coarse grains in several Middle Eastern countries is predicted to expand strongly in 1978/79, as a favorable foreign exchange position allows them to improve their grain usage.

Set-Aside 1979: Few Surprises

Few surprises were in store for farmers who had been awaiting announcement of the 1979 wheat program. With a couple of exceptions, the new program is the same as this year's.

For example, the 1979 program calls for a continuation of the 20-percent set-aside requirement—participating farmers must set aside 1 acre for every 5 acres of wheat planted for harvest to receive program benefits. The set-aside can be used for either approved cover crops or accepted conservation practices.

The 1979 acreage of major crops planted for harvest, plus set-aside, can't be larger than the participants' "normal crop acreage"—basically what was planted in 1977 to most major crops (barley, field corn, sorghum, rice, wheat, upland cotton, oats, rye, soybeans, flax, dry edible beans, sunflower seeds, sugar beets, sugarcane, and any volunteer grain), excluding cover and green manure crops.

Participants who meet the set-aside requirement *and* voluntarily reduce their planted wheat acreage by at least 15 percent (compared with 20 percent this year) from the 1978 level will be eligible for full target price benefits. The 1978 crop level will be adjusted to include any set-aside and special grazing and haying acreage reduction made under the 1978 program.

Farmers who participate in the set-aside provision but don't reduce planted wheat acreage by at least 15 percent will be assured target price protection on not less than 80 percent of their harvested acreage.

Unlike this year's, the 1979 program does not include special payments for grazing out or haying of planted wheat acreage. However, as in 1978, participants may graze their 1979 set-aside acres for a 6-month period, as determined by State Agricultural Stabilization and Conservation Service committees.

The support price, or loan rate, remains at $2.35 a bushel again this year, and the target price stays at $3.40.

The national program acreage of 57.1 million acres—about the same as the preliminary 58 million for 1978—represents the land needed to produce enough wheat for expected demand, as well as carryover.

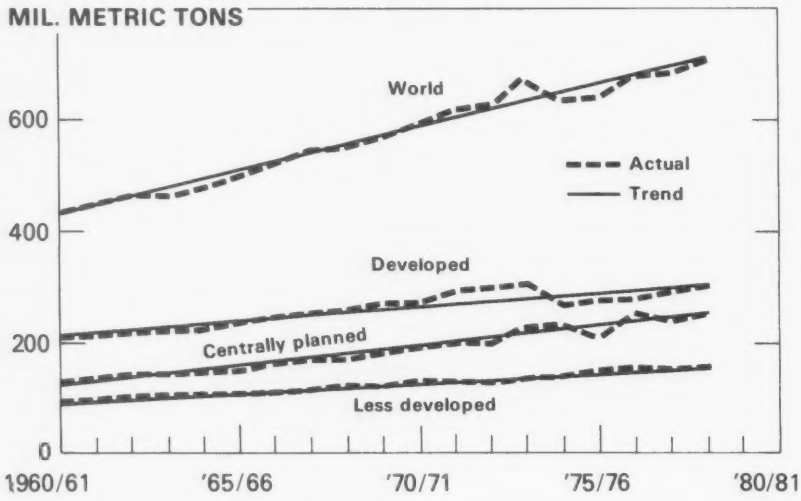
Program objectives and impacts include:

- U.S. stocks to be at 7.5 percent of world wheat use by June 1, 1980, or approximately 1.1 billion bushels. This would include a farmer-held reserve of 400 million bushels and a special reserve of 150 million bushels to meet U.S. food aid commitments.
- Government outlays to drop about $280 million from expenditures for the 1978 crop because of substantially lower deficiency payments and the elimination of the graze-out payments.

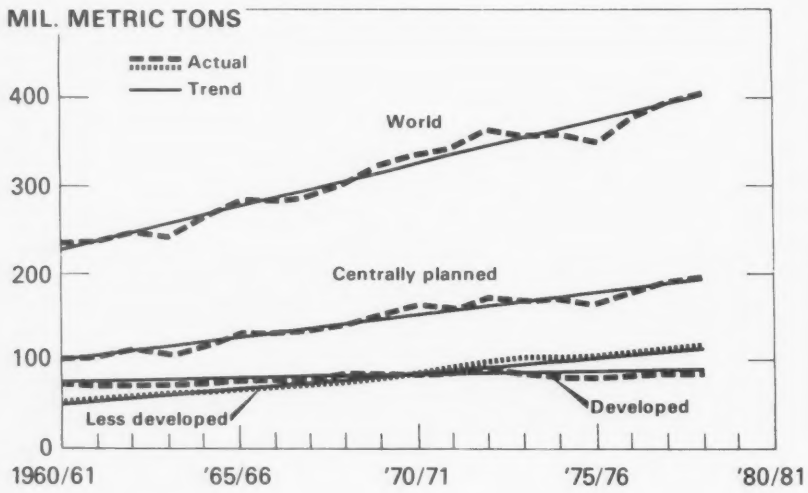
As for feed grains, USDA will make an announcement of the 1979 feed grain program provisions on or before November 15.

World trade. Despite the rebounding of global grain supplies, world trade in wheat and coarse grains during July-June 1978/79 is currently forecast at 155 million tons—about the same as last year.

COARSE GRAIN CONSUMPTION



WHEAT CONSUMPTION



Good weather in several major importing countries means less reliance on purchases from the world market. For example, Western European imports are expected to be down slightly, while U.S.S.R. imports are forecast to drop about 2 million. The bulk of these declines will be in wheat imports.

Japanese imports of wheat and coarse grains are predicted to increase about 1 million tons this crop year, with nearly the entire increase in coarse grains.

Japanese grain demand. Wheat demand is virtually stagnant in Japan, and coarse grain demand could be reduced if the government decides to dispose of excessive rice stocks through subsidized sales to compounders.

Exports of wheat and coarse grains by the U.S. and its major competitors are expected to be about the same during July-June 1978/79 as they were last year. The U.S. reduction is forecast to be only 100,000 metric tons, despite the large harvests predicted around the world.

Australian wheat exports are expected to fall 3.5 million tons below their previous level, and a severe drought has nearly eliminated Brazil as a coarse grain exporter this crop year.

Argentine wheat and coarse grain exports are forecast to decline slightly during July-June 1978/79.

Argentina-PRC agreement. Argentina and the PRC have recently signed a 3-year supply agreement which makes 3 million tons of wheat and corn a year available to the PRC.

By the same token, Turkey and Libya have signed a trade agreement, in which Turkey will supply Libya with 300,000 tons of wheat for a 5-year period.

As for other wheat and coarse grain exporters, Thailand and South Africa

coarse grain exports are forecast above their 1977/78 levels, while the same is true for wheat exports from India and Turkey.

Canadian exports of wheat and coarse grains will be about the same as the previous crop year, as the expected increase in coarse grain exports is likely to be offset by a reduction in wheat exports.

Rice trade. World rice trade in calendar year 1979 is forecast at 8.3 million tons, milled basis, down from 9.1 million in calendar year 1978, and 9.8 million in calendar year 1977. Bangladesh, Hong Kong, and Sri Lanka are some of the nations showing a decline.

Because of excessive rice stocks, Japan is considering food-aid rice exports over the next 3 years. This move could create competition for U.S. rice in Asian markets.

U.S. rice exports are forecast at about 1.5 million tons, milled basis, for calendar year 1979, compared with 2.2 million estimated for calendar year 1978.

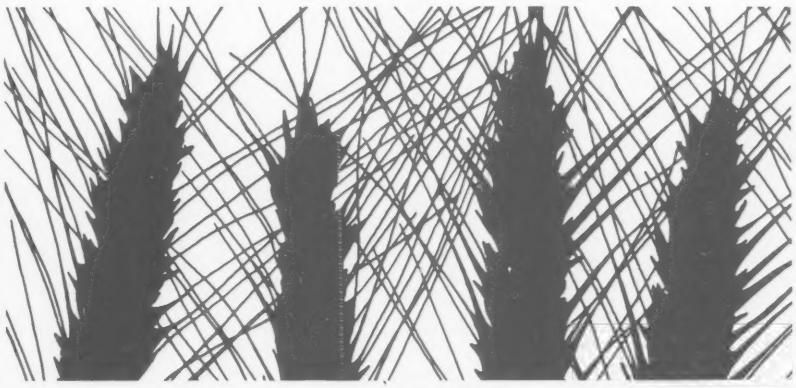
As for the world's grain reserve for 1978/79, beginning stocks of wheat and coarse grains are expected to decline 9.3 million tons from the previous season.

Beginning stocks. And as a percentage of world utilization, beginning stocks are forecast to decline slightly this crop year, although they are still above the levels of 1975/76 and 1976/77.

The U.S., whose wheat and coarse grain carry-in stocks are expected to be slightly more than 13 million tons higher than the previous crop year's, is forecast to hold about 45 percent of the world wheat and coarse grain beginning stocks in 1978/79.

[Based on the October 1978 *World Agricultural Situation.*]

The Cash Question



Large grain crops are predicted throughout the world this crop season, but the big question on the homefront is how American grain farmers will fare pricewise.

First, let's look at wheat farmers.

Thanks to the wheat program, which is predicted to cut domestic production by about a tenth, and to favorable export prospects, at least for the first half of the marketing year, wheat prices are forecast to average in the $2.80 to $3 per bushel range in 1978/79, based on September conditions (the latest data available at press time). Last season's crop averaged $2.31 per bushel.

Of course, what happens to prices on into this marketing year depends largely on the size of the world's wheat harvest. Right now, the 1978/79 world crop is expected to be up about 8 percent from last season's, with just about every major producer reporting improved yields.

U.S. wheat exports could slow down some before the turn of the year. However, exports for the marketing year will almost certainly exceed 1 billion bushels, and may equal the 1.12 billion shipped in 1977/78.

This season's wheat prices will have little impact on the retail cost of cereal and bakery goods, since what affects consumer prices of these items most are marketing conditions and inflation—not farm prices.

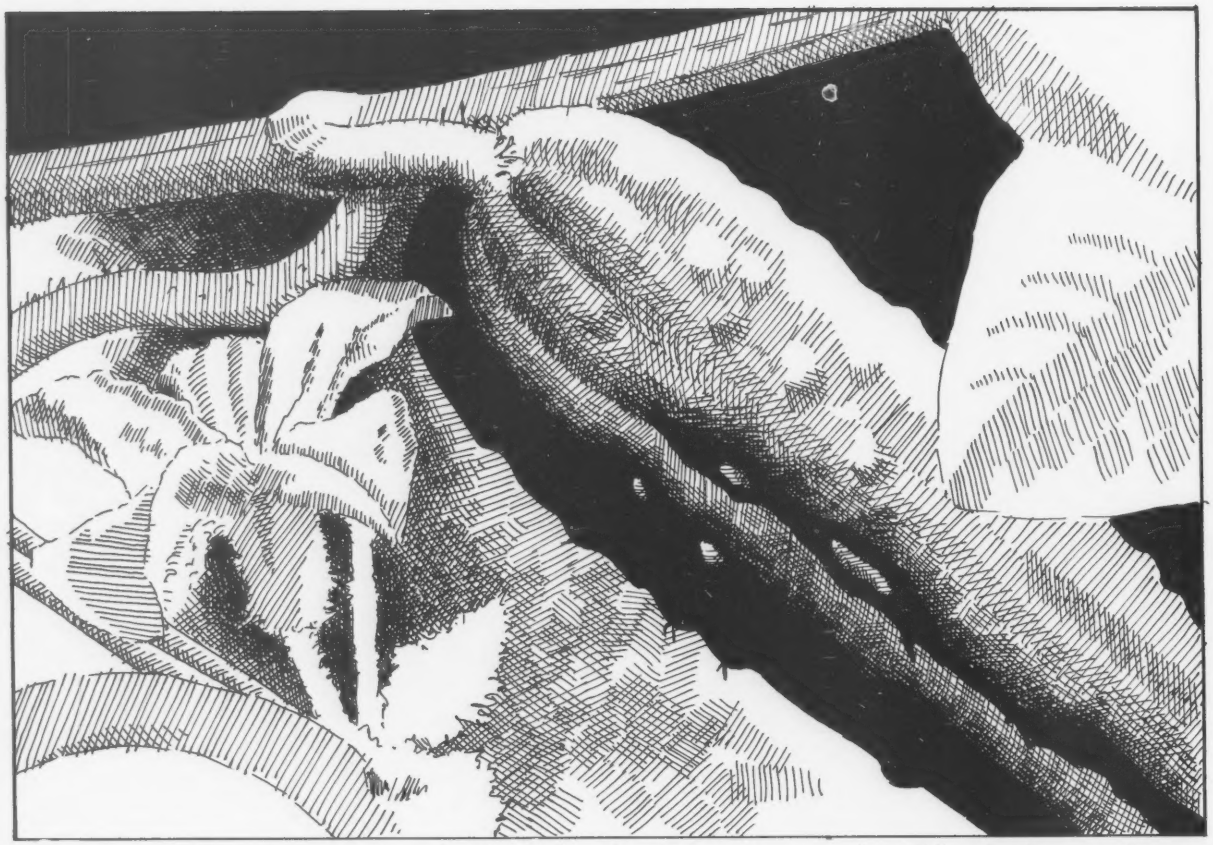
As for feed grains, it looks like producers can expect prices to average about the same this marketing year as in 1977/78. One reason is the size of the U.S. crop, forecast to be even larger than last season's record.

Based on September conditions, prices of corn (this commodity accounts for four-fifths of all domestic feed grains) are predicted to average between $1.85 and $2.05 per bushel in 1978/79, compared with $2.03 last marketing year.

Estimated average prices for the other feed grains are: sorghum, $1.75 to $1.95 per bushel, compared with $1.73 in 1977/78; barley, $1.70 to $1.90, compared with $1.80; and oats, $1.00 to $1.10, compared with $1.14.

[Based on special material from Tom Elam, Commodity Economics Division.]

The Cucumber Craze



Those increasingly popular cucumbers mean more than salad condiments and pickles in the Southeast—they mean money, plus grower concerns over rising imports.

In 1977, the retail value of U.S. fresh market and processed cucumber production exceeded $500 million. Of more than 40 vegetables produced in this country, cucumbers ranked 15th in value of production for fresh sales, and 5th for processing.

And although 36 States produce the green-skinned vegetable for commercial sales, the Southeast boasts about 60 percent of the total U.S. production. Florida, North Carolina, and South Carolina are by far the region's top producers.

The U.S. market is supplied primarily by 16 States—nine of them in the Southeast region—and Mexico. Florida and our southern neighbor each provide about a fourth of the fresh market sales each year.

Semitropical competition. Mexico and other semitropical countries, such as British Honduras, the Bahamas, Guatemala, and Jamaica, have an advantage over U.S. cucumber producers because of their milder winters. Cucumbers are not cold-resistant and can be grown in this country in midwinter only in south Florida. And even there, a crop is occasionally lost to cold weather.

But climate is not the only factor affecting the location of U.S. cucumber production. The supply and quality of soil, water, hand labor, and managerial resources also enter the picture.

The availability of labor is particularly important, since fresh market

cucumbers must be harvested numerous times by hand each season to assure optimum yields and high quality. (Pickling cucumbers are also hand harvested, although mechanical harvesting is becoming more common.)

Florida labor need. In Florida, the labor requirement is especially burdensome. Winter cucumber producers in that State must compete with other vegetable growers, as well as the citrus and flower industries, for a limited supply of labor—especially at harvesttime.

It is possible that mechanization of the State's citrus harvest in the near future and the tomato crop in the more distant future may help relieve the labor situation, but in many recent years, Florida winter cucumber producers often have wondered whether enough harvest labor would be available.

In some areas, however, the high labor requirement for cucumber production is actually a boon to farmers. Take North Carolina. Cucumber operations in that State provide early-season employment for farmworkers, thus contributing to the availability of labor to harvest other crops later in the season.

Mexican advantage. But the demand for hand labor to produce cucumbers—nearly half the U.S. crop cost per acre goes toward fulfilling this requirement—is another reason why Mexico has been able to gain so much ground in the U.S. cucumber scene.

Besides its climatic advantage, Mexico has cheaper wage rates than the U.S. As a portion of total costs, production labor was 4 percent in Mexico and 11 percent in the U.S. in 1974—the latest data available.

The results have been an increase in Mexican cucumber imports and a decline in the U.S. market share by American producers, especially in the Southeast.

From 1967 to 1974, the Southeast's share of total fresh cucumber production fell almost 20 percent, while its share of the domestic market dropped nearly 30 percent.

North Carolina's growth. During this period, only one Southeastern State—North Carolina—showed major market share improvements, while Florida, the largest U.S. supplier, evidenced sharp declines.

Outside the Southeast region, New Jersey, Texas, and California improved their market positions, although Mexico has made inroads into the traditional California and Texas midwestern and western markets.

Market shares from countries other than Mexico declined during this period, as did those from States other than the 16 major U.S. suppliers.

But despite declines in the U.S. market share by domestic suppliers, there is a bright note in the American cucumber story—consumers are eating more.

A recent USDA consumer survey of fresh vegetable preferences reported that taste, ease of preparation, and tiring of eating the vegetable were major factors influencing per capita consumption.

Survey results. Survey participants ranked vegetables into five groups based upon the degree of preference. Cucumbers were in the third most preferred group, along with celery, carrots, cabbage, and green peppers.

Cucumber consumption per capita, both fresh and in pickles, has grown over the past 25 years. Fresh cucumber consumption nearly doubled during this period—especially noteworthy since Americans were eating considerably less fresh vegetables on a per capita basis.

Both processed cucumber consumption and other processed vegetable consumption has been on a per capita upswing during the past 25 years. Cucumbers are Americans' second most popular processed vegetable—after tomatoes.

Since cucumbers are a significant vegetable crop in certain States, especially in the Southeast, maintaining a healthy production and packing industry is important to their agricultural economies.

Boosting cucumbers. What can be done to improve cucumber marketing? Cooperative research among the U.S., Mexico, and other suppliers to the American market could study numerous problem areas, including market development, particularly exports to off-season European markets.

An improved understanding of transportation—including its limitations—is also needed. In this country, cucumbers are transported mainly by truck, usually as part of a mixed load. The vegetables are not precooled, and because cucumbers are susceptible to chilling injury, transit and storage temperatures should not go lower than 7-10 degrees Celsius (45-50 degrees Fahrenheit).

Research on cucumber postharvest handling, physiology, and quality maintenance—particularly related to pack and pallet size—would also be helpful.

[Based on the article, "Cucumber Production, Distribution, and Competition for the U.S. Market: A Southern States' Perspective," by Ernest B. Smith, Commodity Economics Division, and Chris O. Andrew, both with the Food and Resource Economics Department, the University of Florida.]

A Graphic Survey of U.S. Agriculture

The Farm

Editor's Note: Charts used in this article are from the *1978 Handbook of Agricultural Charts*, which has just been released. A free copy may be obtained by writing to ESCS Publications, 0054 So. Bldg., Wash., D.C. 20250. Color slides and black and white prints may be obtained for a fee from USDA's Photography Division, Office of Governmental and Public Affairs, Wash., D.C. 20250. Please cite titles when ordering.

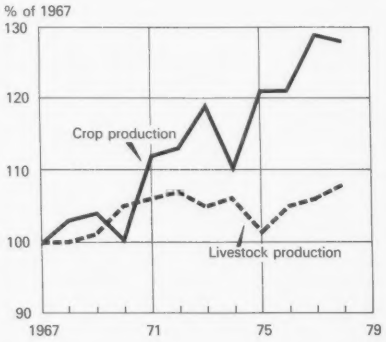
After rising sharply in the early 1970's, prices received by farmers weakened in mid-1977, recovering later in the year. For 1978, prices are expected to average about 15 percent above 1977.

As for prices paid by farmers, they have more than doubled during the past decade. The rate of gain is likely to accelerate in 1978, but remain below 1973-74 levels.

Other news on the homefront includes:

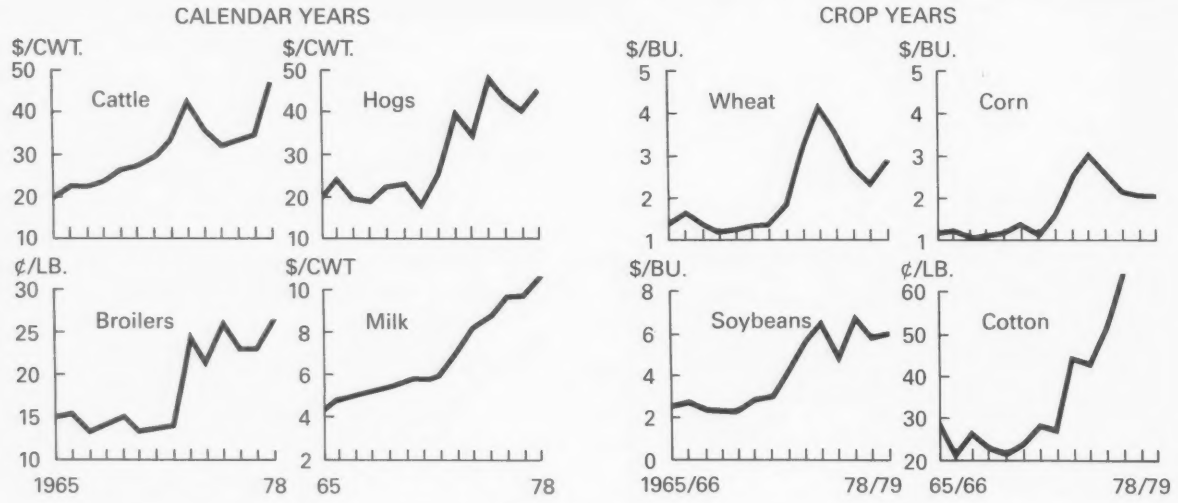
- U.S. farm population numbered about 1.9 million in 1977, down 20 percent from 1970 and 50 percent from 1960.
- Farm operator families, and a largely overlapping group defined as "people living on farms," earned nearly 60 percent of their income from off-farm sources during the past 2 years.
- Crop production in 1978 is near last year's level, while cropland used for crops is down 3 percent, after 5 years of increase. Crop production per acre is at a record level.

Crop And Livestock Production



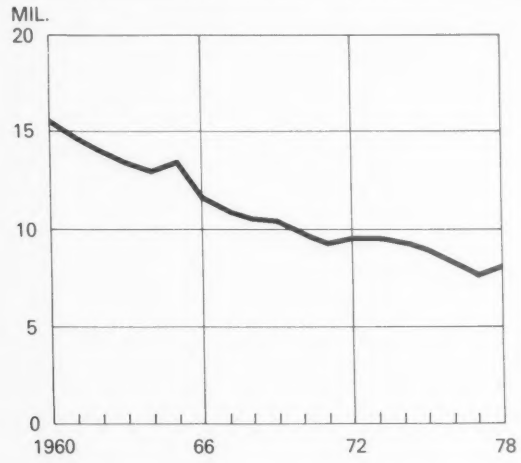
1978 preliminary.

Prices Received By Farmers For Major Commodities

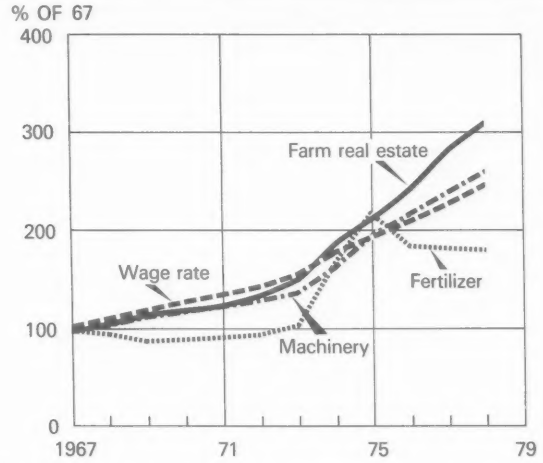


1978 and 1978/79 preliminary.

Farm Population

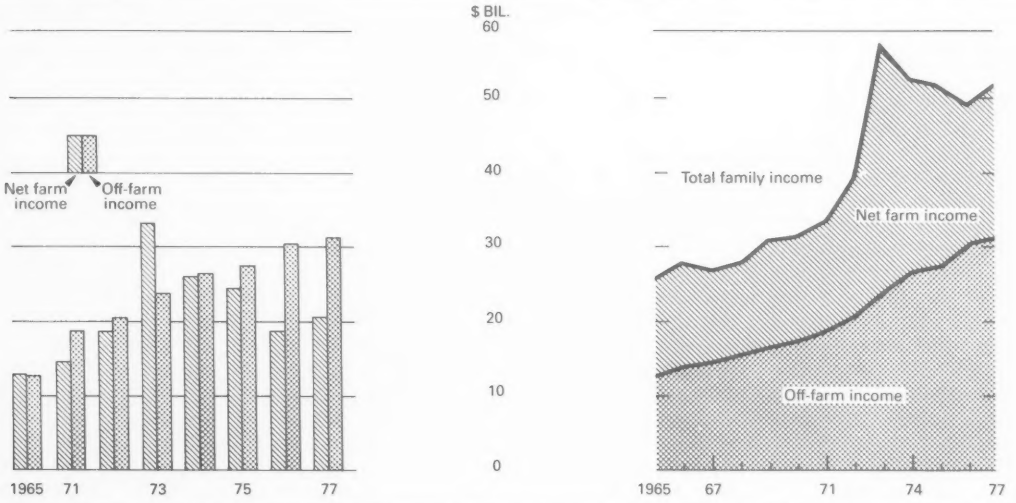


Prices Of Selected Farm Imputs



1978 preliminary.

Income Of Farm Operator Families



Net farm income includes an adjustment for changes in yearend crop and livestock inventories. Represents return to operator families' labor, capital, and management. Data from Farm Income Statistics, July 1978 (ESCS). Totals may not add due to rounding.

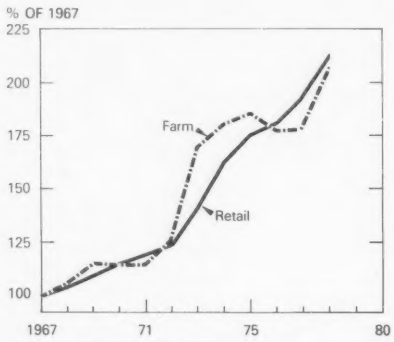
The Consumer

Retail food prices in 1978 will average about 10 percent above a year ago, the sharpest increase since 1974. Red meat prices, which had declined slightly during the preceding 2 years, have figured heavily in the overall price rise.

But compared to most foreign consumers, American food shoppers haven't fared so badly. In fact, the U.S. has had smaller food price rises than nearly any other country in the world.

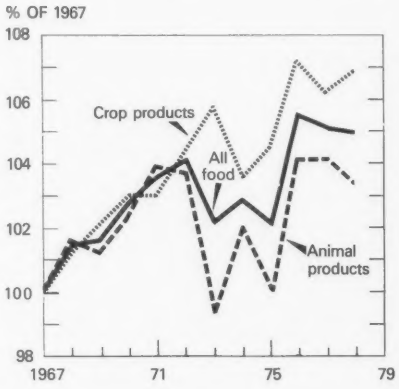
As for domestic consumption, the Index of Per Capita Food Consumption for all foods in 1978 is expected to show a small increase over last year. A 1-percent gain in consumption of foods from crops will offset a decline in foods from animals.

Food Prices: Retail And Farm Value



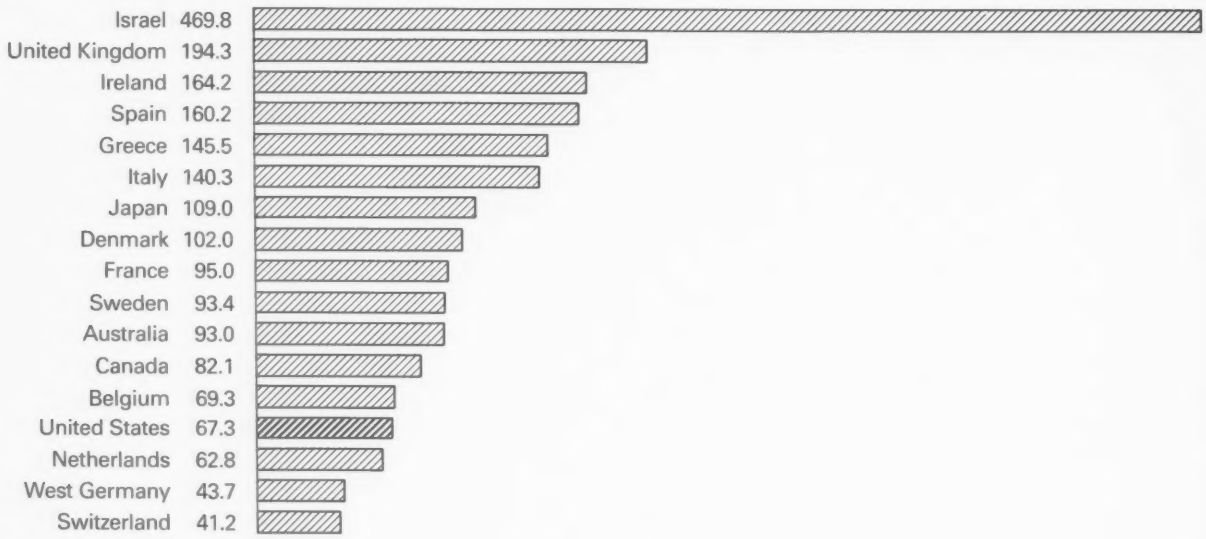
Retail prices, all foods, Bureau of Labor Statistics
Farm value of U.S.-produced farm foods, 1978 preliminary

Per Capita Food Consumption



Items combined in terms of 1957-59 retail prices.

Percentage Increases In Food Prices, 1970-77



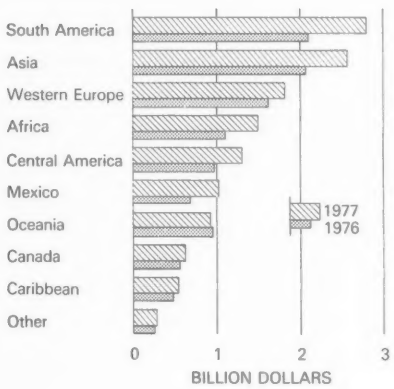
Foreign

The U.S. played a significant role in 1977 world agricultural trade, which totaled $150 billion. American exports ran nearly 16 percent and imports about 9 percent of that value.

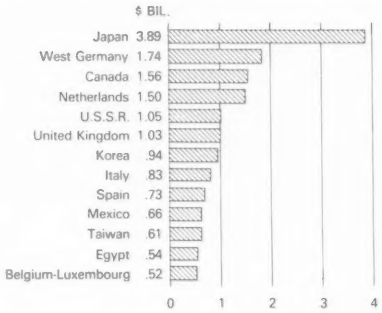
The largest markets for U.S. farm products in 1977 were Japan, West Germany, Canada, Holland, and the U.S.S.R. Other important destinations included the United Kingdom, Korea, Italy, Spain, Mexico, and Taiwan.

Most American agricultural imports come from Latin American countries, including Brazil, Mexico, and Colombia. Asia ranks second regionally, led by Indonesia, the Philippines, and Malaysia.

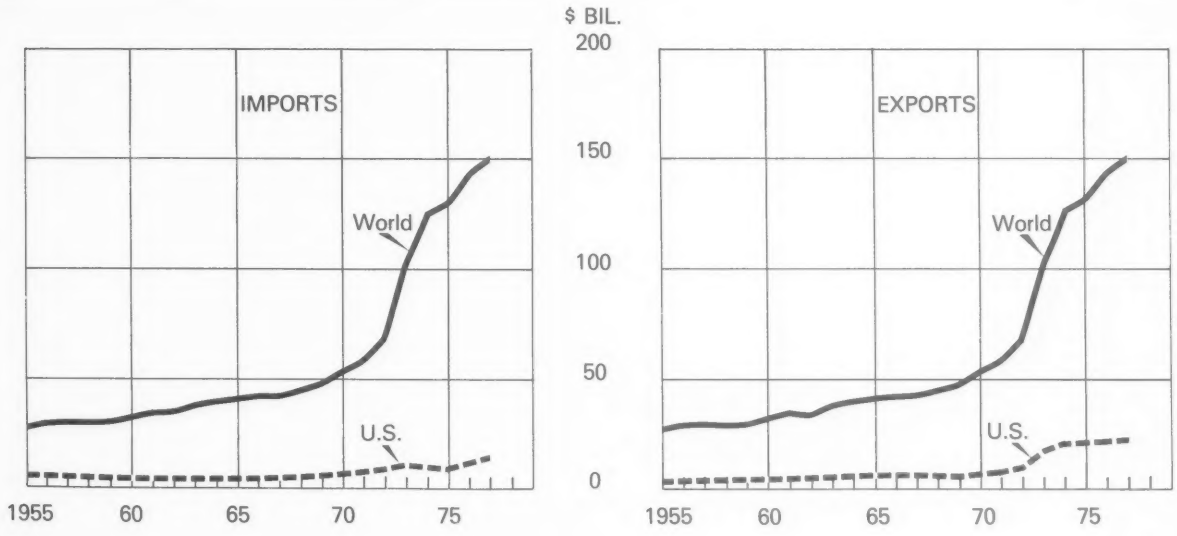
Where We Get Our Agricultural Imports



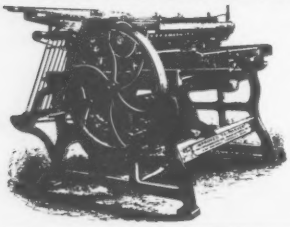
Where We Ship Our Agricultural Exports



U.S. Share Of World Agricultural Trade



Recent Publications



Single copies of the publications listed here are available free from *Farm Index*, Economics, Statistics, and Cooperatives Service, Rm. 300 GHI, 500 12th St. S.W., U.S. Dept. of Agriculture, Washington, D.C. 20250. However, publications indicated by (*) may be obtained only by writing to the experiment station or university indicated. For addresses, see July and December issues of *Farm Index*. Publications marked with (#) may be purchased from NTIS, U.S. Dept. of Commerce, 5285 Port Royal Rd., Springfield, Va. 22161, at the price listed.

An Assessment of Anaerobic Digestion in U.S. Agriculture. Ted Thornton, National Economic Analysis Division. ESCS-06.

The biological process of anaerobic digestion breaks down organic material in the absence of oxygen to produce methane-rich gas and a partially stabilized sludge. The gas can be used for space heating or other farm purposes, and the sludge makes a fertilizer or feed. The feedstock for anaerobic digestion can be manure or processing wastes, thus it can help remove these environmental nuisances. But there are problems, both in the technical and economic sides, and this report examines the whole process for its pluses and minuses.

Land Application of Wastewater: A Cost Analysis. C. Edwin Young, Natural Resource Economics Division. Tech. Bul.-1594.

This report asserts that land application of wastewater is a cost-effective method for advanced wastewater treatment. Land applications are less expensive, says the author, than conventional treatment methods for the relatively small treatment plants. The greatest influence on costs is the selection of crops that the wastewater will be applied to.

Current Economic Research on Food Stamp Use. William T. Boehm and Paul E. Nelson, National Economic Analysis Division. ESCS-37.

This report summarizes four selected food stamp research studies made by analysts in ESCS. The effects of food stamps on food prices, sales, size and kind of retail store, and where and on which food items the stamps are used, are discussed. For single copies, write the authors, Food Economics, Rm. 260, NEAD, ESCS, USDA, 500 12th St. SW, Washington, D.C. 20250.

Net Migration of the Population, 1960-70, by Age, Sex, and Color. Part 7—Analytical Groupings of Counties. Gladys K. Bowles and Calvin L. Beale, Economic Development Division. Population-Migration Report 1960-70, Part 7. (University of Georgia) *

This report is the seventh in the series presenting net migration estimates and rates by age and sex, and by color (where appropriate) for the 1960-70 decade. The net gain or loss of population is shown for specific areas, reflecting net movement of people between the U.S. mainland and other areas.

Growth of Cooperatives in Seven Industries. Lyden O'Day, Cooperative Marketing and Purchasing Division. Cooperative Research Report 1.

Cooperatives have grown greatly in recent years—but in what direction? How much influence do they really have on the marketplace? On competition? Comparative figures on four farm products marketed by cooperatives were gathered for this report. The numbers show that while the amount of goods marketed by cooperatives has increased, most cooperatives do not hold a larger share of the market than they used to.

Free Information for Farmers

One of the toughest parts of farming is getting started. Costs alone can be staggering, and the prospective farmer needs information, too, on other special requirements. Before the neophyte takes the plunge, ESCS can point out things to consider. Send the would-be farmer's name and address to *Farmers' Newsletter*, USDA, Rm. 300-GHI, 500 12th St. SW, Washington, D.C. 20250.

A Simulation of Irrigation Systems: The Effect of Water Supply and Operating Rules on Production and Income on Irrigated Farms. Raymond L. Anderson, Natural Resource Economics Division; and Arthur Maass, Harvard University. Tech. Bul.-1431.

This report, published in cooperation with the John Fitzgerald Kennedy School of Government, Harvard University, describes and illustrates the use of a digital computer model of irrigation systems. Effects of several common variables on crop production and farm income are examined.

Economic Performance of the Processing Tomato Industry. Jon A. Brandt, Purdue University; Ben C. French, Agricultural Experiment Station, University of California at Davis; and Edward V. Jesse, Commodity Economics Division. Bulletin 1888. (University of California, Davis) *

Tomatoes are the most important vegetable, economically, for processing produced in the U.S. In 1975, they were valued (raw product value) at over $535 million, from more than 8.5 million tons. This is the first of two reports detailing the economics of the processing tomato industry.

Economic Trends

[1] Ratio of index of prices received by farmers to index of prices paid, interest, taxes, and farm wage rates. [2] Revised to adapt to weighting structure and retail price indices for domestically produced farm foods from the new Consumer Price Index for all urban consumers (CPI-U) published by the Bureau of Labor Statistics. [3] Annual and quarterly data are on a 50-State basis. [4] Annual rates seasonally adjusted second quarter. [5] Seasonally adjusted. [6] As of March 1, 1967. [7] As of February 1. *Beginning January 1978 for all urban consumers.

Source: USDA (Agricultural Prices, Foreign Agricultural Trade, and Farm Real Estate Market Developments); U.S. Dept. of Commerce (Current Industrial Reports, Business News Reports, Monthly Retail Trade Report, and Survey of Current Business); and U.S. Dept. of Labor (The Labor Force, Wholesale Price Index, and Consumer Price Index).

Item	Unit or Base Period	1967	1977 Year	1977 Aug.	1978 June	1978 July	1978 Aug.
Prices:							
Prices received by farmers	1967=100	—	183	174	217	215	210
Crops	1967=100	—	192	172	216	212	202
Livestock and products	1967=100	—	175	177	219	217	217
Prices paid, interest, taxes, and wage rates	1967=100	—	202	201	220	220	220
Prices paid (living and production)	1967=100	—	196	196	213	214	214
Production items	1967=100	—	200	198	218	218	217
Ratio [1]	1967=100	—	90	87	99	98	95
Producer prices, all commodities	1967=100	—	194.2	194.6	209.4	210.6	210.4
Industrial commodities	1967=100	—	195.1	196.9	208.5	209.9	211.2
Farm products	1967=100	—	192.5	181.8	219.5	219.9	210.3
Processed foods and feeds	1967=100	—	186.1	184.9	204.6	204.5	201.8
Consumer price index, all items*	1967=100	—	181.5	183.3	195.3	196.7	197.8
Food*	1967=100	—	192.2	195.2	213.8	215.0	215.4
Farm Food Market Basket: [2]							
Retail cost	1967=100	—	179.2	180.8	203.6	204.5	204.3
Farm value	1967=100	—	178.1	180.4	215.8	216.2	209.8
Farm-retail spread	1967=100	—	180.0	181.0	196.2	197.4	200.9
Farmers' share of retail cost	Percent	—	38	38	40	40	39
Farm Income: [3]							
Volume of farm marketings	1967=100	—	125	125	101	105	127
Cash receipts from farm marketings	Million dollars	42,817	96,084	7,724	7,821	7,342	9,069
Crops	Million dollars	18,434	48,519	3,664	3,061	3,680	4,328
Livestock and products	Million dollars	24,383	47,565	4,060	4,760	3,662	4,741
Gross income [4]	Billion dollars	49.9	108.1	—	122.5	—	—
Farm production expenses [4]	Billion dollars	38.2	88.0	—	96.0	—	—
Net income before inventory adjustment [4]	Billion dollars	11.7	20.1	—	26.5	—	—
Agricultural Trade:							
Agricultural exports	Million dollars	6,380	23,671	1,541	2,640	2,134	2,392
Agricultural imports	Million dollars	4,452	13,459	1,006	1,149	1,187	1,033
Land Values:							
Average value per acre	Dollars	[6] 168	[7] 450	—	[7] 490	—	—
Total value of farm real estate	Billion dollars	[6] 189	[7] 482	—	[7] 524	—	—
Gross National Product: [4]	Billion dollars	796.3	1,887.2	—	2,087.5	—	—
Consumption	Billion dollars	490.4	1,206.5	—	1,322.9	—	—
Investment	Billion dollars	120.8	297.8	—	345.4	—	—
Government expenditures	Billion dollars	180.2	394.0	—	424.7	—	—
Net exports	Billion dollars	4.9	-11.1	—	-5.5	—	—
Income and Spending: [5]							
Personal income, annual rate	Billion dollars	626.6	1,529.0	1,540.7	1,695.7	1,719.9	1,728.4
Total retail sales, monthly rate	Billion dollars	24.4	59.0	59.0	64.5	64.1	64.6
Retail sales of food group, monthly rate	Billion dollars	5.8	—	13.0	14.3	14.4	14.4
Employment and Wages: [5]							
Total civilian employment	Millions	74.4	90.5	90.8	94.8	94.4	94.6
Agricultural	Millions	3.8	3.2	3.2	3.5	3.4	3.4
Rate of unemployment	Percent	3.8	7.0	7.0	5.7	6.2	5.9
Workweek in manufacturing	Hours	40.6	40.3	40.3	40.7	40.2	40.3
Hourly earnings in manufacturing, unadjusted	Dollars	2.83	5.63	5.68	6.07	6.13	6.13
Industrial Production: [5]	1967=100	—	137.1	138.1	144.9	145.9	146.6
Manufacturers' Shipments and Inventories: [5]							
Total shipments, monthly rate	Million dollars	46,487	111,256	112,019	124,839	123,039	—
Total inventories, book value end of month	Million dollars	84,527	179,714	178,082	189,557	190,927	—
Total new orders, monthly rate	Million dollars	47,062	112,842	112,615	128,088	122,684	—

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